

Behind the Scenes: Water Main Breaks or Leaks

What happens behind the scenes when a water main leak or break is reported? Certain steps are taken every time someone reports a leak or break. The process may start while the caller is still on the phone. We appreciate customer calls because the sooner we are notified, the sooner we can begin the repair.

Our mission is to provide a plentiful supply of the highest quality water to our customers. We are proud that most customers go for many years without an interruption of their water service. Occasionally, a water main break, or its repair, may temporarily interrupt service for some customers. This is the process that we go through every day (and night) to maintain reliable water service for customers.

GCWW dispatchers are on the job 24 hours a day to take your calls

Our dispatcher obtains essential information from the first caller who reports a main break or leak. The dispatcher will ask several questions to determine the quickest course of action. You may be asked questions like, “What is with the closest cross or intersecting street? . . . Is the leak more than or less than a garden hose? . . . Has this affected the pressure in your home? . . . Do you live in a house or an apartment?” The answers help us plan our response to your call.

If you report a large amount of water coming from a main break, the dispatcher will quickly get the address and then may ask for you to hold. The dispatcher is getting a valve operator on his/her way to address the situation while you hold. Please stay on the line to provide crucial additional information, including your name and a call back number. (Sometimes even at 2 AM, the break may already have been reported, but do not take that for granted. We encourage residents to report any water problem.)

The Valve Operator assesses the situation at the site of the main break

Upon arrival at the site, the Valve Operator will decide if and when a shutdown of the water main is needed. GCWW employees take any interruption of water service seriously. If the shutdown will interrupt water service to customers, we try to provide advance notice to those affected. If the main break is causing an unsafe condition or property damage, an emergency shutdown without notification may be necessary. Sometimes the main break itself may interrupt water service immediately or reduce water pressure for some customers.

This is when the physically demanding part of the job starts. All valves vary in the effort and the number of turns required to close the valve. Shutting off a small main break may take only 15 minutes; large mains (16 to 60 inches in diameter) may take more than an hour. Closing very large valves requires hydraulic assistance, and it may take over 500 turns to close. Valves in some areas of high pressure have to be closed slowly to prevent damage to other parts of the system. An average shutdown will consist of three to four valves and will take an average of thirty minutes to completely stop the flow of water.

Repair crews repair the water main after underground utilities are marked

While the valve operator is addressing the situation on site as the first responder, the GCWW Repair Section is prioritizing the event, assessing the number of repair employees available, and determining if more people need to be called in to respond.

The repair crews are bound by law to avoid damage to underground utilities, such as gas, electric, cable, and telephone lines. Before crews can dig around a leak or break, a representative for each of the other utilities must respond by phone or to the site to mark the location of any underground utilities.

After the source of the leak or break is identified and underground utilities are marked, repair crews begin making the repair. On average, it takes six to eight hours after the water is shut off to repair a main on a residential street and return water service to normal. Commercial areas may take longer because pipes are usually larger, and there may be more underground utilities.

We appreciate customers' patience as we work as quickly as possible to make repairs.